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Effects of Motives on Reactions to Safe Sun Messages

Abstract

We investigated whether appearance motive for sun exposure, which strongly predicts exposure behaviour, would predict reactions to safe sun messages. In a survey with an embedded experiment, 245 individuals completed measures of motives, read a safe sun message framed by incentive (appearance/health), tone (directive/nondirective), and valence (gain/loss), then completed measures of reactions. For participants high in appearance motive, an appearance-nondirective message was most persuasive. Regardless of individual's appearance motive, appearance messages produced lower reactance if phrased using nondirective language. To maximise persuasion and minimise reactance in individuals most motivated to sun expose, safe sun messages should focus on appearance using nondirective language.

Introduction

Motives and Their Influence on Tanning Behaviour

Motives can be considered at dispositional and participatory levels (Ingledew, Ferguson, & Markland, 2010). Participatory motives are the contents of goals for a specific domain of behaviour. Participatory motives have been shown to influence several health-related behaviours (Aspden, Ingledew, & Parkinson, 2010; Cooper, Shapiro, & Powers, 1998; Ingledew et al., 2010; Ingledew, Markland, & Ferguson, 2009). One health-related behaviour that is strongly predicted by motives is sun exposure behaviour. Appearance enhancement motive for exposure is a particularly strong predictor of this behaviour (Aspden et al., 2010; Ingledew et al., 2010). As appearance enhancement motive underpins sun exposure behaviour, this motive may also influence how individuals react to messages aimed at reducing sun exposure.

Health Promotion Message Outcomes

Persuasiveness describes the extent to which a message is effective in changing attitudes towards a behaviour, and comprises cognitive, affective, and behavioural components (Wood, 2000). Fear response is also an important outcome. More fear arousing messages generally result in greater positive attitude, intentions, and behaviour change (Witte & Allen, 2000). When a high fear appeal message advocates a behaviour of low perceived efficacy, however, it can result in defensive responding in which individuals reject the message to reduce the fear it causes (Witte & Allen, 2000). A further outcome that can result in message rejection is reactance. Reactance occurs when an individual feels that a message threatens their freedom (Brehm & Sensenig, 1966), and comprises a combination of anger towards, and negative appraisal of, the persuasive attempt (Dillard & Shen, 2005; Rains & Turner, 2007).

Motives and Message Frames

It has been suggested that messages will be most effective in persuading individuals to change if they are framed to appeal to the individuals' predominant motives (Clary, Snyder, Ridge, Miene, & Haugen, 1994; Sanderson & Cantor, 1995). In the domain of volunteering behaviour, messages matched to individual's motives have been shown to produce greater positive affect, be more persuasive, and result in a higher intention to volunteer compared to unmatched messages (Clary et al., 1998; Clary et al., 1994). However, Jones and Leary (1994) assessed the effectiveness of various messages (tanning will harm appearance, tanning will harm health, control) in generating intention to practise safe sun behaviour. Whilst the appearance focused message was most effective overall, it was primarily effective amongst participants *low* in appearance motive. Jones and Leary interpret these results in terms of reactance (Brehm & Sensenig, 1966).

Whether individuals high in appearance motive reject an appearance focused message may depend on other message features, such as whether the message uses directive or nondirective language. Across two behavioural domains (oral hygiene and drinking), messages framed using directive language (e.g. "should") elicited greater reactance than messages using nondirective language (e.g. "could") (Dillard & Shen, 2005; Miller, Lane, Deatrick, Young, & Potts, 2007). This suggests nondirective language supports autonomy, reducing the threat to freedom, and reducing reactance. Nondirective language may reduce the extent to which individuals high in appearance motive feel threatened by and reject safe sun messages.

Messages can also be framed in terms of the gains from complying with advice or loss from not complying. A meta-analysis (O'Keefe & Jensen, 2006) found that for messages advocating disease prevention behaviours, gain-framed messages enjoyed a persuasive advantage over loss-framed messages. It has been suggested that level of involvement may moderate this effect, such that a gain frame has a persuasive advantage amongst individuals

highly involved with the message topic (Rothman, Salovey, Antone, Keough, & Martin, 1993). Supporting this proposal, Rothman et al. (1993) found that women (a group they found to be highly involved with tanning), but not men were more persuaded by a gain-framed message. Whilst a meta-analysis (O'Keefe & Jensen, 2007) did not show a persuasive advantage for gain-framed messages advocating skin cancer prevention, such a nonsignificant main effect may mask a significant interactive effect, such as suggested between level of involvement and message framing.

Present Research

The present research investigates the extent to which motives for sun exposure influence outcomes to safe sun messages. As individuals high in appearance enhancement motive engage in high levels of sun exposure, we were particularly interested in these individuals. We considered how individuals' appearance enhancement motive for sun exposure and the incentive emphasised in a message (appearance or health) interact to influence outcomes. We further considered how other message frames, such as tone of language (directive vs. nondirective) and the valence of consequence emphasised (gain vs. loss) moderate these interactive effects. This research therefore expands upon previous research by considering not only how an individual's motives may interact with the incentive emphasised in a message (Jones and Leary, 1994; Sanderson and Cantor, 1995), but also how this interaction may be moderated by other message features.

Hypotheses

Based on the above considerations, it was hypothesised that:

H1. Outcomes would be predicted by the interaction of motive strength, incentive frame, and tone frame.

H2. Outcomes would be predicted by the interaction of motive strength, incentive frame, and valence frame.

Method

Design and Participants

The study was a survey with an embedded experiment. The survey measured participants' motives. The experiment exposed participants to a safe sun message in which incentive frame, tone frame, and valence frame were manipulated in a two by two by two between-participants design, and outcomes were measured. Ethical approval was obtained. Participants were undergraduate students at Bangor University, United Kingdom, recruited through the psychology department's participation panel and through an advertisement on the university online notice board. Participants were compensated with course credits or monetary compensation. The sample comprised 245 individuals between 18 and 32 years (M = 20.6, SD = 2.6), 68% female. Participants were asked to describe their ethnic background. Of those referring to colour, 92% were white. Of those referring to ethnicity, 94% were European.

Procedure

Data collection took place between February and April. Participants completed measures of motives for sun exposure, read a safe sun behaviour message, and completed measures of outcomes. Data were also collected on dispositional motives, and analysed for other purposes (Aspden, Ingledew, & Parkinson, 2012).

Safe sun behaviour message

The message (see Appendix) was framed in terms of incentive emphasised (incentive frame), tone of language used (tone frame), and valence of consequences emphasised (valence frame). For incentive frame, messages emphasised effects of UV light on appearance (wrinkling prematurely, "leatherlike" appearance, dark patches) or health (skin cancer, melanoma, eye health). For tone frame, advice was given in directive ("should", "must", "it is essential") or nondirective ("could", "might", "it is advisable") language. For

valence frame, messages emphasised gain from complying with advice (“positive effects”, “helps prevent”, “good for”), or the loss from not complying (“negative effects”, “increases the chance of”, “bad for”). These frames (incentive, tone, valence) resulted in eight messages. Each participant received one message, randomly allocated.

Measures

Motives for sun exposure. Appearance enhancement, wellbeing, and conformity motives for sun exposure were measured using four-item scales (Aspden et al., 2010). As appearance enhancement motive is the primary predictor of sun exposure behaviour, analysis focused on this motive only (e.g. "to look glamorous/handsome"). Responses were on a six point scale ranging from *not at all true for me* to *very true for me*.

Cognitive and affective reactions. Perceived threat to autonomy was measured using the four item Perceived Threat to Freedom Scale (e.g. “threatened my freedom to choose”) (Dillard & Shen, 2005). Anger towards the message was measured using Dillard, Kinney, and Cruz’s (1996) four item anger scale (“angry”, “irritated”, “annoyed”, “aggravated”). Anxiety was measured using four items created for the present study (“anxious”, “worried”, “nervous”, “afraid”). Message appraisals were measured using the Cognitive Appraisal Scale (Dillard & Shen, 2005), comprising subscales measuring fairness (eight items, e.g. “is accurate”), attention to the message (four items, e.g. “makes me want to focus on the information”), and importance (two items, e.g. “matters to me”). Perceived effect on intention was measured with two new items assessing positive change (“increases my intention to/makes me keen to practise safe sun behaviour”) and two new items assessing negative change (“decreases my intention to/puts me off practising safe sun behaviour”). These items were intermingled. Instructions were "Please indicate the extent that the following statements describe your reactions to the message you have just read". Responses were on a six point scale ranging from *not at all true* to *very true*.

Attitude towards safe sun behaviour. Attitude was measured with a scale constructed for the present study comprising six words indicating how "beneficial", "enjoyable", "good", "worthless", "unpleasant", and "bad" participants perceived safe sun behaviour to be. Responses were on a five point scale ranging from *disagree* to *agree*.

Intention to practise safe sun behaviour. Intention was measured using a visual analogue scale devised for the present study, anchored by "0: Absolutely no intention" and "100: Highest possible intention".

Decision to request further information. A tick box provided the option to take away a leaflet containing further safe sun behaviour information.

Analytical Procedure

Cognitive and affective reactions to the message were analysed using principal axis factor analysis at the scale level, to form measures of persuasion, anxiety, and reactance. Effects of motives and message frames on outcomes were analysed using multiple regression. Product terms were used to represent interactive effects. To avoid collinearity of product terms with their constituent lower-order terms, each product term was residualised onto its constituent lower-order terms (Little, Bovaird, & Widaman, 2006). Post hoc tests of slope difference were conducted using Dawson and Richter's (2006) slope difference test.

Results

Factor Analysis of Scales

Factor loadings are displayed in Table 1. The three cognitive appraisal scales and the positive effect on intention scale formed a coherent factor. These were combined into a persuasion variable by taking the mean of separate scale scores. The perceived threat to freedom scale, anger scale, and negative effect on intention scale formed a coherent factor, and were combined into a reactance variable. Anxiety did not load highly on either of these factors and was kept as a separate variable.

Descriptive Statistics, Reliabilities, and Correlations

Descriptive statistics, Cronbach's alpha, and correlations are displayed in Table 2. Few participants (4%) opted to request further information, so this variable was not analysed further.

Prediction of Outcomes From the Safe Sun Behaviour Message

Effects involving appearance enhancement motive for sun exposure. Standardised regression coefficients for effects on message outcomes of appearance enhancement motive, message frames, and product terms are displayed in Table 3. The product of appearance enhancement motive, incentive frame, and tone frame predicted persuasion (Figure 1a). Post hoc tests revealed that the slope of appearance enhancement motive on persuasion for the appearance-nondirective message was significantly more positive than the slope for the health-nondirective message (t = 1.98, p = .048), and marginally more positive than the slope for the appearance-directive message (t = 1.93, p = .055), but not different to the slope for the health-directive message. As a result of slope differences, participants with high appearance enhancement motive experienced greater persuasion in response to the appearance-nondirective message than in response to the health-nondirective or appearance directive messages.

The product of appearance enhancement motive, incentive frame, and tone frame also predicted anxiety (Figure 1b). Post hoc tests showed no significant differences between slopes at the .05 level. Using a more lenient criterion of α = .10, the slope for the health-nondirective message was more negative than the slopes of the health-directive (t = -1.83, p = .069) and the appearance nondirective (t = -1.74, p = .083) messages. Thus for participants high in appearance enhancement motive, the health-nondirective message resulted in the lowest level of anxiety.

The product of appearance enhancement motive and tone frame predicted attitude towards safe sun behaviour (Figure 1c). The slope for the nondirective message was more positive than the slope for the directive message. Thus for individuals high in appearance motive, the nondirective message resulted in a more positive attitude towards safe sun behaviour. Appearance motive had a positive main effect on reactance and a negative main effect on intention.

Effects not involving appearance enhancement motive. The product of incentive frame and tone frame predicted reactance. For the appearance focused message, the directive version of the message produced greater reactance ($M = 0.96$, $SD = 0.98$) than the nondirective version ($M = 0.65$, $SD = 0.71$). For the health focused message, the nondirective version of the message produced similar reactance ($M = 0.54$, $SD = 0.61$) to the directive version ($M = 0.53$, $SD = 0.65$). Nondirective messages resulted in higher intention than directive messages.

Discussion

Main Findings

In relation to hypothesis 1, individuals with high levels of appearance enhancement motive experienced greater persuasion in response to the appearance-nondirective message than in response to the appearance-directive or health-nondirective messages. They also experienced less anxiety in response to the health-nondirective message than the health-directive or either appearance message. The interaction of motive strength, incentive frame, and valence frame did not predict message outcomes. Hypothesis 2 was therefore not supported.

Theoretical Implications

Expanding on research demonstrating that appearance enhancement motive for exposure has a strong influence on sun exposure (Aspden et al., 2010; Ingledew et al., 2010),

the present research confirms that appearance enhancement motive also influences outcomes to messages that seek to promote safe sun behaviour. This builds on research showing that motives influence reactions to persuasive messages in other behavioural domains, and with research (Jones & Leary, 1994) showing that dispositional appearance motive influences reactions to safe sun messages.

Jones and Leary (1994) found that, for individuals high in dispositional appearance motive, an appearance message was no more effective than a health message and less effective than a control message in promoting reduced intention to tan, and was no more effective than a health or control message in promoting intention to use sunscreen. The present study qualifies these findings by demonstrating that, for individuals high in appearance enhancement motive for exposure, an appearance message can be more *persuasive* than a health message, provided the message is phrased using nondirective language. For the same individuals, this appearance-nondirective message would also produce more anxiety than a health-nondirective message.

Lower order effects of motives also merit consideration. Research in the drinking behaviour domain (Miller et al., 2007) found that directive language was not significantly different to nondirective language in its effect on attitude to responsible drinking behaviour. Consistent with this finding, the present study found no overall advantage for nondirective messages. However, for individuals high in appearance enhancement motive, nondirective messages did elicit a more positive attitude towards safe sun behaviour.

Valence frame (loss-gain) had no interactive or main effects on message outcomes. This is consistent with the previous finding that, for safe sun behaviour, gain-framed messages do not enjoy an overall advantage over loss-framed messages (O'Keefe & Jensen, 2007). Research suggests that self-efficacy interacts with valence frame of a message to influence outcomes to health-promotion messages (van 't Riet, Ruiter, Werrij & de Vries,

2010). Therefore, the absence of an effect of valence frame in this and other safe sun research could mask an interaction with self-efficacy.

The negative effect of appearance enhancement motive for sun exposure on intention to practise safe sun behaviour is consistent with previous findings (e.g., Prentice-Dunn, Jones, & Floyd, 1997). Prentice-Dunn et al. (1997) speculated that individuals high in appearance motive might have reacted defensively to a safe sun message. The present study reveals that individuals high in appearance enhancement motive for exposure do indeed experience greater reactance to such messages.

The present study found reactance to the appearance focused message was lower if the message used nondirective language. Another method to try and minimise reactance is to avoid explicitly instructing participants to sun protect. For example, an intervention comprising education about photoaging, effectiveness of sun-protection, information on sunscreen, and emphasising attractiveness of a pale complexion was found to increase sun protection intentions (Jackson & Aiken, 2006). This intervention emphasised importance of protection without directly instructing participants to protect. Similar to using nondirective language, avoiding telling individuals to sun-protect could reduce perceived threat to freedom.

Recent research into safe-sun promotion messages suggests that those low on intention to protect demonstrate more favourable outcomes to resource communication interventions whilst those intending to protect demonstrate more favourable outcomes to planning interventions (forming plans to initiate/maintain behaviour) (Craciun, Schüz, Lippke, & Schwarzer 2012). Based on this research the present intervention, focusing on communication of risk and precautionary measures, may be most effective amongst those who have not yet formed intentions to sun-protect.

Applied Implications

Appearance enhancement motive is a strong predictor of sun exposure (Aspden et al., 2010; Ingledew et al., 2010). Safe sun interventions will therefore need to appeal to individuals high in this motive. A primary aim will be to make the messages as persuasive as possible. As these appearance motivated individuals tend to experience greater reactance to safe sun messages, it will also be important to minimise such reactance.

The present study demonstrates that an appearance focused message can be more persuasive amongst individuals high in appearance enhancement motive, as long as it is framed using nondirective language. Amongst these same individuals, nondirective messages elicit more positive attitude towards safe sun behaviour. There was also an overall effect for those receiving the appearance focused message to experience less reactance if they received the version phrased using nondirective language. Furthermore, there was an overall effect for those reading a nondirective message to experience greater intention to engage in safe-sun behaviour than those reading the directive message. For these appearance motivated individuals, this appearance nondirective message may produce more anxiety (than a health nondirective message), but this anxiety will be conducive to behaviour change provided there is sufficient perceived efficacy. Importantly, such appearance focused nondirective messages were not shown to have any negative influence on outcomes for individuals with low appearance enhancement motive. Therefore, to maximise persuasion, increase positive attitude towards and intention to engage in safe sun behaviour, and minimise reactance in those individuals most motivated to expose themselves to the sun, safe sun messages should focus on appearance incentives and be phrased using nondirective language.

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Table 1

Factor Loadings for Exploratory Factor Analysis of Cognitive and Affective Reactions

	Factor	
Scale	Persuasion	Reactance
Message fairness	**.61**	-.23
Attention to the message	**.91**	.09
Importance of the message	**.82**	-.04
Positive effect on intention	**.76**	-.18
Negative effect on intention	-.17	**.56**
Perceived threat to freedom	-.19	**.76**
Anger	-.07	**.85**
Anxiety	.31	.45

Note. $N = 245$. Boldface indicates factor loadings > .50. Total variance explained = 56.46

Table 2

Means, Standard Deviations and Reliabilities

	Descriptive statistics			Correlations							
Variable	*M*	*SD*	Reliability	1	2	3	4	5	6	7	8
1. Incentive frame	0.49	0.50	-	-							
2. Tone frame	0.51	0.50	-	.00	-						
3. Valence frame	0.50	0.50	-	.00	-.01	-					
4. Appearance enhancement motive for exposure	2.22	1.19	.93	-.06	.14*	.04	-				
5. Persuasion	3.08	1.00	.85	.05	-.15*	-.01	-.04	-			
6. Reactance	0.67	0.77	.77	-.18**	-.10	-.03	.23**	-.24**	-		
7. Anxiety	1.03	1.10	.89	.05	.11	-.09	.29**	.24**	.33**	-	
8. Attitude to safe sun behaviour	3.26	.61	.76	.08	.08	-.08	-.20**	.33**	-.33**	-.10	-
9. Intention to practise safe sun behaviour	79.66	19.17	-	.09	.08	-.02	-.34**	.46**	-.29**	-.05	.50**

Note. $N = 245$.

*$p < .05$, **$p < .01$

Table 3

Effects of Exposure Motives and Message Frames on Message Outcomes: Standardised Regression Coefficients

	Dependent variable				
Independent variables	Persuasion (R^2 = .11)	Reactance (R^2 = .16**)	Anxiety (R^2 = .16**)	Attitude to safe sun behaviour (R^2 = .11*)	Intention to practise safe sun behaviour (R^2 = .17**)
Incentive frame	.06	-.17**	.06	.08	.07
Valence frame	.00	-.05	-.11	-.05	.00
Tone frame	.16*	-.15*	.06	.12	.13*
Appearance enhancement motive	-.06	.25**	.30**	-.22**	-.34**
Incentive frame x valence frame	.08	-.04	.08	.02	.03
Incentive frame x tone frame	-.05	.14*	.04	-.12	.05
Incentive frame x appearance enhancement motive	.00	-.09	.01	.10	.02
Valence frame x appearance enhancement motive	.01	-.07	-.05	.02	.03
Tone frame x appearance enhancement motive	.12	-.04	.00	.13*	-.01
Incentive frame x valence frame x appearance enhancement motive	.09	-.02	-.07	-.01	.09
Incentive frame x tone frame x appearance enhancement motive	-.14*	.08	-.13*	-.05	-.03

Note. $N = 245$.

*$p < .05$, **$p < .01$. For incentive frame, appearance is coded 0 and health is coded 1. For tone frame, directive is coded 0 and nondirective is coded 1. For valence frame, loss is coded 0 and gain is coded 1.

Figure Captions

Figure 1. Interactive effects of appearance enhancement motive for sun exposure and message frames.

Appendix

Safe Sun Promotional Message Paragraphs

Paragraph 1: Introduction to the problem (received by all participants)

Intense exposure to the sun has increased amongst Europeans over the past century. The sun is the main source of ultraviolet (UV) light for most people; other sources include artificial tanning devices such as sunbeds and sunlamps. Too much exposure to UV light from the sun or from artificial tanning devices can have adverse effects on the body.

Paragraph 2: Appearance-gain version

Practising safe sun behaviour can have positive effects upon appearance. It helps prevent the skin from wrinkling prematurely and acquiring a ‘leatherlike’ appearance. Protecting against excessive exposure to UV light also reduces the number of dark patches or ‘liver spots’ that appear on the skin with age.

Paragraph 2: Appearance-loss version

Not practising safe sun behaviour can have negative effects upon appearance. It can increase the premature wrinkling of the skin and lead to a ‘leatherlike’ appearance. Failing to protect against excessive exposure to UV light also increases the number of dark patches or "liver spots" that appear on the skin with age.

Paragraph 2: Health-gain version

Practising safe sun behaviour can have positive effects upon health. It decreases the chance of developing skin cancer, including melanoma, which is the most deadly form of skin cancer as it can spread to other organs in the body. Protecting against excessive exposure to UV light is also good for the health of the eyes.

Paragraph 2: Health-loss version

Not practising safe sun behaviour can have negative effects upon health. It increases the chance of developing skin cancer, including melanoma, which is the most deadly form of

skin cancer as it can spread to other organs in the body. Failing to protect against excessive exposure to UV light is also bad for the health of the eyes.

Paragraph 3: Directive version

To protect your appearance (avoid damage to your appearance/ protect your health/avoid damage to your health), you should therefore reduce the amount of time that you spend in the sun, and must also avoid using sunbeds or sunlamps. It is essential that you avoid the sun between 11am and 3pm when it is at its strongest. If you do go out in the sun, you must wear clothing to cover up the skin, and should also wear a hat and sunglasses. It is also essential to cover any exposed skin with sunscreen of at least Factor 15.

Paragraph 3: Nondirective version

To protect your appearance (avoid damage to your appearance/ protect your health/avoid damage to your health), you could therefore reduce the amount of time that you spend in the sun, and might also want to avoid using sunbeds or sunlamps. It is advisable that you avoid the sun between 11am and 3pm when it is at its strongest. If you do go out in the sun, you could wear clothing to cover up the skin, and may also want to wear a hat and sunglasses. It is also advisable to cover any exposed skin with sunscreen of at least Factor 15.

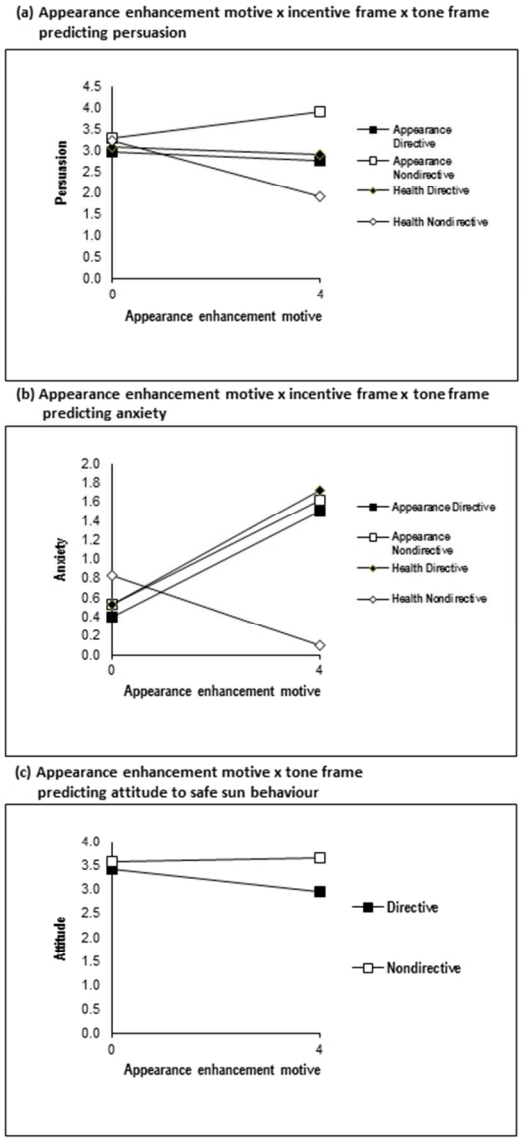

Figure 1. Interactive effects of appearance enhancement motive for sun exposure and message frames.
254x338mm (72 x 72 DPI)

Referee

Comments to the Author

This is a very interesting paper with important implication for health promotion practice.

Thank you for your comments. Below we set out the additions we have made in response to these comments. Additions are highlighted in blue below and in the manuscript. As required by the editor, we have also reduced the length of the text to around 3000 words.

However, results should also be discussed in the context of existing literature on appearence motives (see KAckson & Aiken, 2006 for isntance), influence of other factors such as self efficacy and other interventions (see Craciun et al. 2012. 2010, 2011) on sun protection.

We now discuss the results in the context of research into self-efficacy and message framing, stating:

"Valence frame (loss-gain) had no interactive or main effects on message outcomes. This is consistent with the previous finding that, for safe sun behaviour, gain-framed messages do not enjoy an overall advantage over loss-framed messages (O'Keefe & Jensen, 2007). Research suggests that self-efficacy interacts with valence frame of a message to influence outcomes to health-promotion messages (van 't Riet, Ruiter, Werrij & de Vries, 2008, 2010). Therefore, the absence of an effect of valence frame in this and other safe sun research could mask an interaction with self-efficacy." (p. 13)

We also now discuss the results in the context of other interventions, including the research of Craciun and colleagues and the research into appearance focused interventions of Jackson and Aiken, stating:

"The present study found reactance to the appearance focused message was lower if the message used nondirective language. Another method to try and minimise reactance is to avoid explicitly instructing participants to sun protect. For example, an intervention comprising education about photoaging, effectiveness of sun-protection, information on sunscreen, and emphasising attractiveness of a pale complexion was found to increase sun protection intentions (Jackson & Aiken, 2006). This intervention emphasised importance of protection without directly instructing participants to protect. Similar to using nondirective language, avoiding telling individuals to sun-protect could reduce perceived threat to freedom.

Recent research into safe-sun promotion messages suggests that those low on intention to protect demonstrate more favourable outcomes to resource communication interventions whilst those intending to protect demonstrate more favourable outcomes to planning interventions (forming plans to initiate/maintain behaviour) (Craciun, Schüz, Lippke, & Schwarzer 2012). Based on this research the present intervention, focusing on communication of risk and precautionary measures, may be most effective amongst those who have not formed intentions to sun-protect." (p. 14)

When was the study conducted? In summer?

We now state in the procedure section that "Data collection took place between February and April." (p. 7)

Did the participants receive some incentive for particiapting?

We now state that "Participants were compensated with course credits or monitory compensation." (p. 7)